Cooper, R., 2015, Neurodiversity and dyslexia: challenging the social construction of specific learning difficulties. Available at: http://outsidersoftware.co.uk/research-and-links/docs/, Accessed on: 03 May 2015.

Reporting on this astonishingly interesting paper from Cooper that adds weight to Cavanagh's (2013) thesis that it is the learning curriculum that needs to be fixed rather than dyslexic learners by arguing that it is the teaching and education systems that '*cause the experience of dyslexia*'.

Cooper is a strong advocate of, shall we say, the neurodiversity model of dyslexia which takes as its main focus the idea that the collection of alternative 'thinkings', 'doings', 'learnings', 'imaginings', 'innovationings' strategies that are collectively identified (although most still speak of 'diagnosing' (*=medical* model!)) as constituting the 'dyslexia profile' are an example of natural human (neuro)diversity.

Furthermore, in accepting this model Cooper directs our thinking away from the deficit agenda that frames dyslexia within the context of conventional learning environments where the response to identifying so called specific learning *difficulties* is to create a agenda of 'reasonable adjustments' by arguing that 'difficulty' is a consequence of educational expectation and that learners who think in other ways have to be 'fixed' in order to conform with this expectation.

This conventional educational experience is said to be built on an agenda that supports socio-educational conformity to 'normality', or at perhaps more usefully described as a 'normal envelope' where subject domains are generally distinct and disjoint from each other, each comprising their own hierarchical structure of learning progression from basic to less-basic and where the interrelationships between and across domains is subsumed by the need to learn and memorize facts and regurgitate these in assessment processes that reward those with good memories and disenfranchise others who function in more holistic ways that need 'meaning' to be the focus of learning and as such, rail against 'rote' learning and providing 'expected' answers that can be measured and graded according to prescribed, externally set standards.

Cooper says that:

'put simply, the structure of education is intolerant to holistic approaches to learning which rely on passionate interest, making interesting connections across subject boundaries, learning in bursts (when the pattern of information resolves into meaning) and intuitive approaches based on learning by 'feel''.



But this causes me to reflect on how would we create learning environments with the flexibility to properly meet the needs of such a wide scope of learning diversity? How would an 'academic argument', even such as this one that Cooper is creating, be presented to others without writing an essay, assignment or paper where a thread of ideas, development of ideas, summarizing and linking form a natural progression in the construction of an academic argument but where it is commonly agreed, those with, shall we say a 'dyslexic thinking style' persistently struggle to meet these conventional expectations for communicating their knowledge. How would we present the evidence of learning and knowledge acquisition in non-linear ways and is this 'linearity' natural to everyone's thinking processes or is it a result of learning conditioning where those who fall within this 'normal envelope of thinking and learning' have little difficulty in being conditioned but those outside it really struggle?

Many (academic) domains have already conquered this need for greater diversity in assessing learning and we need look no further than The Arts, such as painting, sculpture, music, where the quality of the product that is 'academic output' is a physical thing rather than a linear, systematically organized collection of ideas and analysis. We might argue that this includes domains such as architecture and engineering (perhaps particularly areas such as product engineering) where academic output is measured and assessed in the context of a 'practical project', even medicine where although this relies on a good memory for learning facts, the quality of the 'output' might be judged according to abilities to think laterally, deductively, imaginatively when drawing on these facts in order to rationalize the presentation of medical symptoms into a diagnosis of a condition.

But in the humanities, business, social sciences, The Essay steadfastly remains the conventional mechanism for measuring academic competencies where the manipulation of language and literacy are the tools required to 'get the job done. Cooper posits that post-industrial education was designed to serve broadly economic and systemic purposes to reinforce social and workplace conventions that suit the variety of roles from workers to managers and that this involves *literacy* so that 'bureaucracies can function effectively and instructions can be disseminated and followed (ibid, p2). However, consider this last point about 'following instructions': what alternatives are there to instructions being in text-based formats? In the global marketplace for commodities, we are increasingly consumers of products that originate from outside our own local industries and that are shipped from centralized manufacturing bases to diverse markets where the instructions for assembling the parts for Hoover, or ensuring that a piece of workshop equipment is operated properly and safely, or a component of flat-pack furniture is correctly assembled in the right sequence of construction processes are more often visually presented rather than in any and all of a multitude of languages as a set of ordered instruction in text.

So this evidences alternatives to text for communicating knowledge or presenting facts. What is required in learning environments is a much more flexible approach that permits learners to engage with learning more holistically

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rather than sequentially and which rewards innovation as readily as it currently rewards accuracy in conventional assessment.

References

Cavanagh, D., 2013, Outbound Train: The instructor support project, Universal Design for Learning and the role of technology, *QScience Conference Proceedings 2013*, Global Innovators Conference 2013:7, http://dx.doi.org/10.5339/qpproc.2013.glc.7